

Decision 05-05-048 May 26, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Almond Tree Hulling Co.; Arakelian Farms;
Baugher Ranch; Beretta Property Management;
Campos Brothers Farms; Central California
Almond Growers Association; Central Valley
Almond Association, Inc.; CF Koehen & Sons,
Inc.; Dairyland Hullers; Farmers Cooperative;
Harriet Baldwin; Harris-Woolf Almond Huller;
Hashem Naraghi; Hilltop Circle L. Ranch;
James M. Paiva; James R. Lewis Orchards Inc.;
John Wynn; Mintum Almond Coop, Inc.; North
State Hulling Co-op, Inc.; Pacific Almond Co.;
Paramount Farms, Inc.; Paramount Farming
Company; Parreira Almond Processing Co.;
Peter D. Peterson; Stewart and Jasper Orchards;
South Valley Farms; Strain Orchards; The Hulling
Company; TM Duche Nut Co. Inc.;
Vernon Paddack; West Valley Hulling/Barry
Baker; Xcel Shelling, LLC.,

Complainants,

vs.

Pacific Gas and Electric Company and DOES 1
through 100,

Defendant.

Case No. 04-01-020
(Filed January 21, 2004)

Paul G. Kerkorian, Attorney at Law,
Utility Cost Management, Inc. for Complainants.
Daniel F. Cooley, Attorney at Law, for
Pacific Gas and Electric Company, Defendant

O P I N I O N

Introduction

In this case, we are called upon to decide whether a group of 32 almond hullers/shellers located within the service territory of defendant Pacific Gas and Electric Company (PG&E) are required to take electric service from PG&E under commercial rates, or are entitled to service at the lower agricultural rates PG&E offers pursuant to § 744 of the Public Utilities Code. This requires us to construe the eligibility criterion for PG&E's agricultural tariff, which states in pertinent part:

"A customer will be served under this schedule if 70 percent or more of the energy use is for agricultural end-uses. Agricultural end-uses include growing crops, raising livestock, pumping water for agricultural irrigation, or other uses which involve production for sale, *and which do not change the form of the agricultural product.*" (Emphasis added.)

Since there is no real dispute that complainants satisfy the other eligibility conditions, the controlling issue in this case is whether the hulling and shelling process changes the form of the agricultural product—the almond. PG&E contends that the hulling and shelling process changes the form of the unhulled almond, which PG&E believes is the agricultural product. Complainants, on the other hand, contend that no change in form occurs, because the hulling and shelling process simply removes “extraneous plant material” while leaving the almond intact—thereby preserving its form.

On October 25, 2004, the Presiding Officer’s Decision (POD), prepared by Administrative Law Judge Myra J. Prestidge, was mailed to parties. The POD denied the complainants request to be included under PG&E’s agricultural tariff rates for their hulling/shelling operations. The POD found that the unhulled almond consists of three distinct agricultural products—the hull, the shell and

the almond (or almond meat)—and that the removal of the hulls and shells constitutes a change in the form of the agricultural product making the hulling/shelling process ineligible for more favorable agricultural tariff rates. The POD was subsequently appealed by the complainants on the basis that hulls and shells are agricultural residues and their removal does not alter the agricultural product—the almond itself.

After careful consideration of this matter, we accept the complainants appeal. We conclude that (1) the agricultural product is the almond itself, and not the hull or shell, and (2) the removal of the hulls and shells from the almond does not constitute a "change of form" within the meaning of PG&E's eligibility statement. Thus, the complainants are entitled to service under PG&E's agricultural tariff.

As a consequence of this decision, complainants are entitled to a refund of the difference between what they have been billed for hulling/shelling under PG&E's commercial tariffs since the Fall of 2003 (when they first asked to be billed at agricultural rates) and what they would have been billed for the hulling/shelling under PG&E's agricultural tariffs.

Background

California produces approximately 80% of the world's almond crop. During the 1980's and 1990's, because of increasing demand, almond production in the state rose dramatically. Almonds remain a top agricultural commodity for California. In 1992, California produced 548,000,000 pounds of almonds at a total

value of approximately \$691,340,000. In 2001, California produced 830,000,000 pounds of almonds at a total value of \$731,880,000¹.

Almonds grow on almond trees in orchards throughout the state. The almond meat, or almond, is enclosed by a hard shell, which is in turn enclosed in a soft, pulpy outer covering known as the hull. The almond is not attached to the shell. The hull is attached to the tree and the shell. Over time, as the almond matures, the hull hardens. In some cases, around August, the hull begins to open while the almond is still on the tree, exposing the shell.

In at least 50% of cases,² hulling and shelling occur away from the orchard at which the almonds are grown.³ Almond growers may join a hulling and/or shelling cooperative or may contract with a commercial hulling and/or shelling operator. Cooperatives usually require the growers to pay a fee to join, but

¹ See 2002 California Department of Food and Agriculture Resource Directory entitled California Agriculture: A Tradition of Innovation at p. 92, referred to as Exhibit (Exh.) 102.

² According to Antonio Campos, who testified on behalf of Complainants, approximately 50 % of the time, some smaller almond growers hull and/or shell their own almonds on or adjacent to the property at which the almonds are grown and may also hull and/or shell almonds grown by family members or a few neighboring orchards at the site. *Id.* at 25:1-10, 45:1-25. However, Gordon Doughty testified on behalf of PG&E that in almost 100% of cases, hulling and shelling occur away from the property at which the almonds are grown. Exh. 201, at page 5:23-25. Complainants' own responses to PG&E data requests show that Complainants generally hull and/or shell almonds grown in orchards located from 8 to 45 miles away from the hulling/shelling facility. Exh. 201, Attachment E. Growers often send their almonds to the closest hulling/shelling facility, but may sometimes use a more distant facility affiliated with a cooperative of which they are a member or an operator with whom they have a personal relationship.

³ Under PG&E's tariff, eligibility for an agricultural rate does not depend on whether the activity for which the electricity is used occurs on or off the property at which the agricultural product was raised or grown.

sometimes return to the grower all or part of the value of the hulls (which may range from \$40 to \$70 per ton) and the shells (whose energy value may be \$20 per ton). Almond hullers and/or shellers may also receive the hulls and shells, which can then be sold, as compensation for this work.⁴ Commercial operators generally charge higher fees and do not return any of the hulls or shells to the grower.

Almond hulling and shelling is a seasonal operation, which usually begins in August and ends in December or January. Although there are some variations in the process, the hulling and shelling process generally occurs as follows:

- Removal of Almonds from the Tree/Drying of Almonds on the Orchard Floor. First, the almond trees are shaken by a device known as a “shaker,” knocking the almonds, which are still enclosed in the hull and shell, to the orchard floor. The almonds remain on the orchard floor for approximately 7 to 10 days for drying. The almonds are then raked into rows by a sweeper machine and are left on the orchard floor for several more days.
- Sweeping of Almonds from Orchard Floor/Transportation of Almonds to Huller/Sheller. After drying, the almonds are removed from the orchard using large mobile bins, which either have rotating paddle-like appendages to sweep the almonds into the bin or vacuums to suck the almonds into the bin. As the almonds are swept or vacuumed into the bins, leaves, twigs, and dirt from the orchard floor (trash) are also swept into the bins. The almonds and the trash are then transported to the hulling and/or shelling facility. Hulls and shells sometimes break away as the almonds are propelled into the bins, are transported to the

⁴ Id. at 41:14-26.

huller/sheller, or are unloaded at the hulling and/or shelling facility.⁵

After drying, the almonds must be promptly removed from the orchard floor and should generally be hulled within 90 days, in order to avoid insect infestation or the development of fungus, mold, mildew and salmonella, which make the almonds inedible.⁶

- Separation of Almonds from Trash By Vibrating Screens. At the hulling and shelling operation, the trash is separated from the almonds by putting the material through a series of vibrating screens, sometimes called scalping decks. The almonds fall through the vibrating screen, away from the trash which remains in the screen.
- Cracking/Breaking of Hulls and Shells by Shear Rolls and/or Hulling Cylinders. The almonds are then placed on conveyor belts and moved to shear rolls and/or hulling cylinders. Shear rolls are hard rubber rotating cylinders. The conveyor belt moves the almonds under the sheer rolls in order to crack the hulls. The almonds move under a series of shear rolls, each of which has a smaller clearance between the cylinder and the almonds, so that the hulls crack gradually.

A small portion of almond hulling and shelling is accomplished with hulling cylinders. Hulling cylinders are rotating drums, which have prongs and bars inside. The almonds are placed in the hulling cylinders, which bang the almonds against the prongs and bars, causing the hull and shell to crack. Hulling cylinders are generally used in addition to shear rolls, rather than instead of shear rolls.

⁵ According to Campos, approximately 30 to 50 % of the time, the hulls have already fallen off of the almonds by the time that the almond reaches the hulling/shelling facility. RT 18:21-22. Approximately 5 to 10% of the time, the shells also fall off before the almonds reach the hulling/shelling facility. RT 19:4-10.

⁶ RT 13:1-27.

The hulling and shelling equipment squeezes the hulls and shells, causing them to crack, splinter and fracture.⁷

- Removal of Loose Hulls and Shells by Vibrating Screens. The almonds are then moved to vibrating screens. The vibrations knock the loose hulls and shells and pieces of hulls and shells off of the almonds. The hulls and shells fall through the screens, leaving the raw almonds unhulled and unshelled.
- Use of Aspirators to Blow Away Lighter Pieces of Hulls and Shells. As the almonds move along the conveyor belt, aspirators blow air on the almonds, which also blows away lighter pieces of the hulls and shells.
- Separation of Unhulled/Unshelled Almonds from Hulled/Shelled Almonds by Gravity Tables. The almonds then move to gravity tables, which are vibrating tables with a slight incline. The vibrations separate any heavier unhulled or unshelled or partially unhulled or unshelled almonds from the hulled and shelled almonds.
- Repetition of Hulling/Shelling Process if Almonds Are Not Fully Hulled or Shelled. If the hull or shell has not been fully removed, the almonds are put back through the shear rolls or hulling cylinders. The almonds often go through 14 to 22 shear rolls before the hulls and shells are fully removed and the process is complete.⁸
- Shelling Process as Distinguished from Hulling Process. Most of the time, the same operator performs both hulling and shelling at the same facility. However, in a smaller percentage of cases, operators hull, but do not shell, the almonds.⁹ In this case, hullers use the same process as described above, but generally put the almonds through only 7 or 8 shear rolls so that the shell will not be removed.

⁷ RT 48:17-28, 49:1-23.

⁸ RT 26:17-27.

⁹ RT 54:7-12.

Hullers and shellers may also perform additional functions required by the federal government, such as weighing the almonds, sorting them by size, fumigating them to prevent insect infestation, and inspecting the almonds to remove any which are damaged or inedible.

According to the California Almond Board, approximately 92% of almonds sold in California are both hulled and shelled at the time of sale. Approximately 79% of these almonds are sold as raw, whole almonds, and approximately 19% undergo a manufacturing process, such as roasting, blanching, slicing, slivering, or salting, before sale. Approximately 80% of almond sales in California are to industrial users who use almonds as an ingredient in manufactured food items, such as cookies, cakes, etc.

In-shell almonds comprise approximately 8% of almonds sold in California. Approximately 84% of these almonds are sold to India and China. The governments of India and China have specified that only in-shell almonds may be sold to their countries, in order to provide their citizens with jobs shelling almonds. When almonds are sold to India and China, the huller is asked to set the shear rolls to make slight indentations in the shell so that Indian and Chinese workers can shell the almonds more easily.

On a national level, approximately 67% of almonds sold within the United States are shelled, and 2% of these almonds are sold in their shells, and the rest of the 31% of almonds sold in the United States undergo some manufacturing process before sale.

Approximately 75% of the almonds exported out of the United States are shelled, and only 11% of these almonds are exported in-shell. Approximately 14% of the almonds exported out of the United States undergo a manufacturing process before sale.

There is no market for in-hull almonds because of health risks associated with the high moisture content in the hull.

However, a sizeable market for almond hulls, to be used as cattle feed, exists in California. For example, California produces approximately 800,000 tons of almond hulls, which have a market value of approximately \$100 per ton, or \$80 million.¹⁰ Complainants alone sell over 500,000 tons of almond hulls annually, which at even \$50 per ton, have a value of \$25 million.¹¹ According to Complainants, the shells may be sold for approximately 1¢ per pound.¹² Complainants produce approximately 190,000 tons of almond shells annually,¹³ which would have an approximate value of \$3,800,000 per year.

Discussion

PG&E's Agricultural Rate Applicability Statement (the PG&E tariff) states:

A customer will be served under this schedule if 70% or more of the energy use is for agricultural end-uses. Agricultural end-uses include growing crops, raising livestock, pumping water for agricultural irrigation, or other uses which involve production for sale, and which do not change the form of the agricultural product. (Emphasis added.)

PG&E does not dispute that at least 70% of the electricity used by Complainants is utilized in hulling and shelling. Therefore, under the plain language of the tariff, whether almond hullers and shellers are entitled to receive electric service at a discounted agricultural rate depends solely on whether the hulling and shelling process changes the form of the agricultural product.

¹⁰ Exh. 205, 206.

¹¹ Exh. 201.

¹² RT 39:13-14.

¹³ Exh. 201, Attachment B; Exh. 201B.

We have previously addressed the applicability of the PG&E tariff to the processing of agricultural products in prior proceedings, most pertinently in D.97-09-043 Producers Dairy, and in D.03-04-059 Air Way Gins.

In Producers Dairy, we found that a dairy, which pasteurized, homogenized, and added vitamins to raw milk and separated the raw milk into different milk products based on the fat content, such as whole milk, skim milk, and cream (standardization), qualified for agricultural rates under PG&E's tariff because these activities do not change the form of the milk. We noted that these processes do not alter the appearance of the milk and prepare the raw milk for human consumption. For example, pasteurization quickly heats the milk in approximately 30 seconds to make it safe for human consumption, homogenization prevents fat globules from floating to the top and thereby increases the shelf life of the milk, and adding vitamins A and D to the pasteurized milk restores the vitamins that naturally exist in raw milk but are destroyed during pasteurization and storage. We stated that standardizing the milk also does not change its form because all of the resulting milk products were originally contained in the raw milk. We also found PG&E's reasoning in denying agricultural rates for milk processing inconsistent because processing raw milk does not change the form of the product more than other agricultural processing activities that receive service at an agricultural rate, such as sorting eggs by size and grade, waxing apples to improve their appearance, and cutting the leafy tops off of carrots.

In addition, we reasoned that although a market might exist for raw, unprocessed milk, the major market for milk is for human consumption, and the Legislature did not intend to force milk producers to find less viable markets for their products in order to benefit from lower agricultural rates for electricity.

In Air Way Gins, we found that cotton ginning qualifies for electric service at an agricultural rate under PG&E's tariffs, because cotton ginning separates two agricultural products, the cottonseed and the cotton fiber, without damage to either one of them. We rejected arguments by PG&E that separating the fiber from the seeds involves a change in the form of the cotton because both the seed and the fiber emerge intact from the process, even if some "tearing" or "disassociation" occurs. We further stated that even if some severing or tearing were to occur, the ginning process seemed less drastic a change to the form of the product than the removal of leaves and cutting tops off of carrots that PG&E treats as eligible for agricultural tariffs. We distinguished cotton ginning from removing the pits from peaches or apricots, a process which clearly changes the form of the fruit, because cotton ginning is essentially a separating and cleaning process that does not involve severing, crushing, or cutting into the cotton fiber or cotton seed.

In Air-Way Gins, we did not decide whether the standard for determining if an agricultural product has undergone a change in form is whether the process for which an agricultural rate is sought "invades the corpus" of the product, as argued by PG&E. However, we stated that in determining whether an agricultural product has undergone a change in form due to processing, the relevant analysis involves a before-and-after comparison of the constituent parts of the agricultural product, such as the cottonseed and the cotton fiber, rather than the before-and-after condition of the raw product as it is harvested from the field.¹⁴ We also reasoned that severing, crushing, or cutting into an agricultural product "are processes that would seem to come within a common-sense

¹⁴ Id. at p. 22

definition of a change in form.”¹⁵ We also stated that we tend to agree that, “... obvious invasions of the corpus of an agricultural product, such as animal slaughtering and peach pitting, constitute a change in the form of the product.”¹⁶

As in Producers Dairy, Air-Way Gins finds that in determining whether a particular activity involves production of an agricultural product for sale or processing of an agricultural product under the PG&E tariff, the Commission must consider the nature of the actual markets for the products, not theoretical markets. We also noted that the intent of the Legislature in enacting § 744¹⁷ was not to expand the class of customers entitled to an agricultural rate to include a broad group of agricultural processors.¹⁸

In this complaint proceeding, we are asked to determine whether the form of the agricultural product is changed by hulling and shelling operations. We note that the almond meat, or almond, is enclosed by a hard shell, which is in turn enclosed in a soft, pulpy outer covering known as the hull. Complainants contend that the shell and hull are extraneous plant material that simply protect and enclose the almond until it is ready to harvest. And the removal of the shell and hull is necessary to reach the agricultural end product—the almond meat or almond. Therefore, complainants believe they are qualified for the agricultural tariff rate as the form of the product—the almond—does not change in the hulling/shelling process.

¹⁵ Id. at p. 17.

¹⁶ Id. at p. 22, n. 15.

¹⁷ Section 744 directs all electrical corporations, including PG&E, to file tariffs with the Commission for optional interruptible service and optional off-peak demand service for “agricultural producers,” which are defined under § 744(a) as “any person or corporation whose principal purpose is the agrarian production of food or fiber.”

¹⁸ AirWay Gins, supra, at p. 20-21.

On the other hand, PG&E contends that the agricultural product is not the almond meat, but instead it is the unhulled almond which consists of three constituent parts—the hull, the shell, and the almond (almond meat)—all of which are agricultural products. And since the hullers/shellers change the form of the agricultural product by removing the hull and by severing and removing the shell, they change the form of the unhulled almond and are therefore not qualified for the agricultural tariff rate. PG&E adds that there exists a substantial market for the hulls and shells as well.

Based on our review of the record, we agree with the complainants that PG&E's agricultural tariffs should apply to almond hulling/shelling. We are unconvinced by PG&E's argument that the unhulled almond is the agricultural product. We find that the almond, or almond meat, is the agricultural product and that hulling and/or shelling does not change the form of the almond. While the appearance of the unhulled almond changes dramatically from a fuzzy hull, surrounding the hard shell that completely encloses the almond meat, the form of the almond kernel itself does not change. Almond hulling and shelling does not alter in any way the almond itself, nor does it change the appearance of the almond itself.

In Air-Way Gins we found the relevant analysis involves a before-and-after comparison of the constituent parts of the agricultural product, such as the cottonseed and the cotton fiber. The constituent part of the agricultural product—the almond—remains the same after hulling and shelling. Thus, the complainants are entitled to an agricultural rate because the principal agricultural product, *e.g.*, the almond meat, is not cut into, severed, crushed, or changed as a result of hulling and/or shelling.

We accept Complainants' arguments that almond hulling and shelling are analogous to other activities that qualify for an agricultural rate under PG&E's tariff, such as cutting the leafy tops off of carrots, removing the stems from raisins, or removing the outer leaves from cabbage and lettuce. Each of these processes more closely resembles removing the in-hull almond from the almond tree, because they separate the agricultural product from the plant on which it is grown.

We agree with the Complainants' argument that hulls and shells are merely agricultural residues, rather than agricultural products. Although we recognize that it could be argued that the development of markets for hulls and shells as cattle feed and cattle bedding means that hulls and shells can be considered as agricultural products in their own right, almond orchards are planted for almonds, not shells and hulls. We further note that the promotion and development of a market for shells and hulls mitigates the environmental problem that disposal of the hulls and shells otherwise would create. Plus, air pollution requirements prohibit the burning of hulls and shells (RT 17:21-27), and almond growers will use caution in putting hulls and shells into the ground to avoid making the soil too acidic (RT 17:4-19).

Even though there is a viable market for the almond hulls and shells, we found in Producers Dairy that "we do not believe that the intent of the legislature was to force milk producers to find less viable markets in order to benefit from AG rates." The record shows that the primary market is for unshelled almonds, while a much smaller, but viable market exists for in-shell almonds, especially almonds to be sold to India and China. There is no market for in-hull almonds. Almond growers should not have to leave their product in-shell in order to benefit from lower AG rates.

The role of agricultural tariffs is to provide discounted rates for customers engaged in agricultural activities, and eligibility for an agricultural rate must be based on the nature of the particular activity involved and the language of the tariff. Having found an economically viable use for hulls and shells, should not automatically preclude almond growers, hullers and shellers from receiving a discounted agricultural electric rate.

We note, further, that the language of the PG&E tariff does not give clear guidance as to when utility customers involved in producing or processing an agricultural product (except for customers directly growing crops or livestock or pumping water for irrigation) qualify to receive electric service at an agricultural rate. The key phrase which determines eligibility for an agricultural rate for these processes, “which do not change the form of the product,” is subject to conflicting interpretations by customers, PG&E, and the Commission. As noted in Air-Way Gins, the tariff has led to almost metaphysical arguments about whether a particular agricultural process should qualify for an agricultural rate and has necessitated several Commission decisions to adjudicate disputes between PG&E and its customers.¹⁹

Conclusion

For the reasons discussed above, Complainants qualify to receive electric service at an agricultural rate under the PG&E tariff and they are entitled to a refund of the difference between what they have been billed for hulling/shelling under PG&E's commercial tariffs since the Fall of 2003 (when they first asked to be billed at agricultural rates) and what they would have been billed for the hulling/shelling under PG&E's agricultural tariffs. We find that no interest

¹⁹ Air-Way Gins, *supra*, at pp. 17-19.

award is warranted because PG&E's tariff eligibility language can be considered subjective and imprecise.

Comments to Draft Alternate Decision

On May 13, 2005, Commissioner Peevey's draft order was filed and served on parties. On May 20, 2005, comments were received from Complainants and PG&E.

Complainants support the draft order in all respects except one. Complainants would like PG&E to refund the difference between what the Complainants "...were actually charged and what they would have been charged under agricultural rates, during the period beginning three years prior to the date each Complainant requested agricultural rates..." Complainants cite past Commission decisions—Air-Way Gins and Producers Dairy, as well as PG&E's tariffs and the Public Utilities Code to support their view. In both Air-Way Gins and Producers Dairy, the Commission found that complainants were entitled to refunds for three years beyond the date first requested to be moved to the agricultural tariff. Complainants also cite PG&E tariff Rule 17.1(B)1.a that requires that customers overcharged because of billing error, be refunded for the overcharge for a period of three years. The billing error identified by the Complainants is "an inapplicable rate" as mentioned in PG&E tariff rule 17.1(A)-Billing Error Defined. Complainants further cite Public Utilities Code Section 736 and claim that it authorizes refunds of overcharges to go back for a three year period.

PG&E does not support the draft order primarily on the grounds that almond hulling and shelling activities change the form of the agricultural

product, and that the draft order is not consistent with past Commission decisions regarding the applicability of agricultural rates. PG&E further states that it requested Commission guidance in Air-Way Gins regarding whether almond huller / shellers should receive agricultural rates and no guidance was provided. Therefore, PG&E argues that if it is required to provide Complainants refunds, it should not be responsible for refunds beyond the time from which the Complainants first requested relief. Also, PG&E states that if refunds are ordered, that refunds reflect whether a customer was on time-of-use rates or not. That is, customers on time-of-use commercial meters should be rebilled on time-of-use agricultural rates and likewise for non-time-of-use meters.

We have reviewed the comments and are unconvinced that any changes are needed to this alternate order, with the exception that refunds make certain that time-of-use and non time-of-use rates are considered when calculating differences between agricultural and commercial rates.

We agree with PG&E that refunds are warranted from the date originally requested by Complainants in the fall of 2003, and not for three years earlier. Because the change-of-form language in PG&E's agricultural tariff eligibility statement can be considered subjective and imprecise, the Commission's duty in this case is to construe the tariff language as written. And we make the determination that almond hullers are entitled to electric service under agricultural tariff schedules. We do not find the argument that PG&E placed Complainants on an inapplicable rate schedule meritorious, since the applicable rate schedule is at issue in this proceeding. Past Commission decisions on similar matters are not binding—our orders in Air-Way Gins and Producers

Dairy were case specific, and we are under no obligation to grant relief similar to that ordered in these past proceedings. Therefore, a reasonable and fair outcome is to require refunds from the date originally requested by Complainants to be placed on agricultural tariffs.

Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Myra J. Prestidge is the assigned ALJ and the presiding officer in this proceeding.

Findings of Fact

1. Almonds grow commercially in orchards and are enclosed by a hard shell, which is enclosed in a fuzzy hull.
2. Almonds must generally be hulled within 90 days of removal from the tree and must be both hulled and shelled for human consumption.
3. The primary market is for hulled and shelled almonds. A much smaller market exists for in-shell almonds. There is no market for in-hull almonds.
4. Hulls and shells are used for cattle feed and cattle bedding.
5. In 2001, California produced 830,000,000 pounds of almonds at a total value of \$731,880,000.
6. California annually produces approximately 800,000 tons of almond hulls, which have a market value of approximately \$100 per ton, or \$80 million.
7. Complainants produce approximately 190,000 tons of almond shells annually, which may be sold for at least 1 cent per pound, or approximately \$3,800,000 per year.
8. Hulling and shelling is a highly mechanized process, which generally includes the following steps:
 - a. Removal of the almonds, still in their hulls and shells, from almond trees with a “shaker.”

- b. Drying of the almonds on the orchard floor for at least 7 to 10 days.
 - c. Sweeping of almonds from the almond floor using large mobile bins, which either have rotating paddle-like appendages to sweep the almonds into the bins or vacuums which suck the almonds into the bin.
 - d. Transportation of the almonds to the huller/sheller.
 - e. Separation of the almonds from dirt, twigs, leaves, etc., by putting the material through the series of vibrating screens.
 - f. Placement of the almonds on conveyor belts.
 - g. Moving the almonds through a series of shear rolls and/or a hulling cylinder to gradually crack, break open, fracture, or splinter the hulls and shells.
 - h. Movement of the almonds to a series of vibrating screens, which separate the unhulled, unshelled almonds from loose hulls and shells or pieces of hulls and shells.
 - i. Use of aspirators to blow away lighter pieces of hulls and shells as the almonds move along the conveyor belt.
 - j. Separation of unhulled/unshelled almonds from hulled and shelled almonds by gravity tables.
 - k. Putting any unhulled or unshelled almonds back through the shear rolls or hulling cylinders until the hull and shell are completely removed.
9. Hullers and shellers must generally put the almonds through 14 to 22 shear rolls before the hulls and shells are fully removed.
10. In the small percentage of cases in which the almonds are hulled but not shelled, the almonds generally go through only 7 or 8 shear rolls so that the shell remains intact.
11. The hulling and shelling process breaks, cuts into, cracks, fractures, and splinters the hulls and shells.

12. The PG&E tariff in relevant part states that a customer is entitled to an agricultural rate for electricity if at least 70% or more of the electricity used is for an “agricultural end-use.”

13. The PG&E tariff defines “agricultural end uses” to include “growing crops, raising livestock, pumping water for irrigation, or other uses which involve production for sale, and which do not change the form of the product.”

14. The parties do not dispute that Complainants use at least 70% of the electricity at their facilities for hulling and shelling operations.

15. The almond, or almond meat, is the agricultural product and hulling and/or shelling does not change the form of the almond.

16. Hulling and shelling is similar to other agricultural activities that qualify for an agricultural rate under PG&E’s tariff, such as removing the stems from raisins, cutting the leafy tops off of carrots, and removing the outer leaves of cabbage and lettuce, because these processes involve separating the agricultural product from extraneous plant matter, and therefore more closely resemble removing the almond from the almond tree.

17. Although there exists a market for almond hulls to be used as cattle feed, and for shells to be used as cattle bedding, almond hulls and shells are agricultural residues of almond growing.

18. Almond orchards are planted for the production of almonds, not shells and hulls.

19. In Producers Dairy, we found that it was not the intent of the legislature to force almond producers to forego profitable markets in order to qualify for agricultural rates because there is a market for in-shell almonds.

Conclusions of Law

1. Even though the change-of-form language in PG&E's agricultural tariff eligibility statement can be considered subjective and imprecise, the Commission's duty in this case is to construe the tariff language as written.
2. Eligibility for an agricultural rate under PG&E's tariff does not depend on whether the activity for which the electricity is used occurs on or off the property at which the agricultural product was raised or grown.
3. In determining whether an agricultural activity, other than raising crops or livestock or pumping water for irrigation, qualifies for an agricultural rate under PG&E's tariff, the Commission must determine whether the activity changes the form of the agricultural product.
4. Under Air Way Gins, whether an agricultural product has undergone a change in form due to processing is based on a before-and-after comparison of the constituent parts of the agricultural product, rather than the before-and-after comparison of the raw product as it is harvested from the field.
5. Under Producers Dairy and Air-Way Gins, the Commission must consider the existence of actual markets for the agricultural products, rather than theoretical markets, in determining whether a particular activity qualifies for an agricultural rate.
6. The Legislature did not intend agricultural customers to be forced to forego profitable markets for their products in favor of less viable markets in order to qualify for an agricultural rate.
7. The role of an agricultural tariff is to provide discounted rates for customers engaged in agricultural activities.
8. Eligibility for an agricultural rate under PG&E's tariff must be based on the particular use of electricity involved and a reasonable, common-sense

interpretation of the tariff based on its language, or if the language is ambiguous, the regulatory or legislative intent behind the tariff.

9. Under PG&E's tariff, a reasonable, common-sense definition of "change in form" would generally include, but would not be limited to, cutting into, breaking open, crushing, fracturing, splintering, or slicing the agricultural product.

10. Regarding the relevant agricultural products, Complainants' almond hulling and/or shelling operations do not effect a "change in form" within the meaning of the PG&E tariff. Consequently, Complainants' electricity consumption for these operations qualifies for the agricultural rate under the PG&E tariff.

11. Because almond hulling/shelling is eligible for agricultural rates under PG&E's current agricultural eligibility statement, complainants are entitled to a refund equal to the difference between what they have been billed for their hulling/shelling activities under PG&E's commercial tariffs and what they should have been billed for these activities under PG&E's agricultural tariffs.

12. Each complainant should receive the refund described in the preceding Conclusion of Law for the period beginning on the date on which the complainant formally requested such a refund from PG&E, as set forth in Exhibit B attached to the complaint in this proceeding, to the date each complainant is converted to an agricultural rate.

13. Complainants should receive electrical service from PG&E for their almond hulling/shelling activities at the applicable agricultural tariff so long as PG&E's current agricultural tariff eligibility statement remains in effect.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E), within 90 days after the mailing date of this decision, shall provide electrical service for almond hulling/shelling activities to each complainant herein at PG&E's applicable agricultural rate so long as PG&E's current agricultural tariff eligibility statement remains in effect..

2. PG&E, within 90 days after the mailing date of this decision, shall refund to each complainant in this proceeding, for the period beginning on the date set forth under the column labeled "Date Requested" in Exhibit B attached to the complaint herein, and ending on the date that each complainant is converted to an agricultural tariff, an amount equal to the difference between what such complainant was billed for its almond hulling/shelling activities under the commercial tariff that PG&E applied, and what such customer should have been billed for its almond hulling/shelling activities under PG&E's applicable agricultural tariff. Refunds shall reflect whether a customer was on time-of-use rates or not. That is, customers on time-of-use commercial meters are to be rebilled on time-of-use agricultural rates and likewise for non time-of-use meters, and the difference refunded.

3. This proceeding is closed.

This order is effective today.

Dated May 26, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President

SUSAN P. KENNEDY
DIAN M. GRUENEICH
JOHN A. BOHN
Commissioners

I dissent.

/s/ GEOFFREY F. BROWN
Commissioner